Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Article 31, Annex II, as amended by Commission Regulation (EU) 2020/878

EXENCE REINFORCER S

Date of first edition: 12/9/2024

Safety Data Sheet dated 24/07/2026 version 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Mixture identification:

Trade name: EXENCE REINFORCER S

Trade code: 10062024

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Paints/coatings - Protective and functional

Uses advised against: All uses other than recommended ones

1.3. Details of the supplier of the safety data sheet

Company: KERAKOLL S.p.A.

Via dell'Artigianato, 9

41049 Sassuolo (MODENA) - ITALY

Tel.+39 0536 816511 Fax. +39 0536816581

safety@kerakoll.com

1.4. Emergency telephone number

European emergency phone number 112

Ireland Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.

Members of the public Number (8 am-10 pm): +353 (0)1 809 2166

Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

Malta In case of emergency call: +356 2395 2000 (24h)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 3	Flammable liquid and vapour.
STOT SE 3	May cause respiratory irritation.
STOT SE 3	May cause drowsiness or dizziness.
Asp. Tox. 1	May be fatal if swallowed and enters airways.
Aquatic Chronic 2	Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) No 1272/2008 (CLP):

Hazard pictograms and Signal Word



Danger

Hazard statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves and eye protection.
P331	Do NOT induce vomiting.
P501	Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH066 Repeated exposure may cause skin dryness or cracking.

Contains

2-methoxy-1-methylethyl acetate

Hydrocarbons, C9, aromatics

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Dir. 2004/42/EC (VOC directive)

Binding primers

EU limit value for this product (cat. A/h): 750 g/l

This product contains max 739.2 g/l VOC.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: EXENCE REINFORCER S

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥50-<70 %	Hydrocarbons, C9, aromatics	CAS:128601-23-0 EC:918-668-5	Flam. Liq. 3, H226; STOT SE 3, H335; STOT SE 3, H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411, M-Chronic:1, EUH066	01-2119455851-35
≥5-<10 %	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	EC:919-857-5 Index:649-327-00-6	Asp. Tox. 1, H304; Flam. Liq. 3, H226; STOT SE 3, H336, EUH066	01-2119463258-33
≥5-<10 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediatley and dispose off safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and label hazardous.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

N.A.

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

For emergency responders:

Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

7.2. Conditions for safe storage, including any incompatibilities

Store the product at a temperature between +5°C and +30°C.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Incompatible materials:

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Community Occupational Exposure Limits (OEL)

Hydrocarbons, C9, aromatics

CAS: 128601-23-0	NATION DENMARK AL	Long Term: 10 ppm Source: At-vejledning C.0.1-1

2-methoxy-1-methylethyl acetate

CAS: 108-65-6	EU	Long Term: 275 mg/m3 - 50 ppm (8h); Short Term: 550 mg/m3 - 100 ppm Notes: Skin
	NATION AUSTRIA AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: Ceiling - 550 mg/m3 - 100 ppm Notes: 5(Mow), 8x, MAK, H Source: BGBl. II Nr. 156/2021
	NATION BELGIUM AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: D Source: Code du bien-être au travail, Livre VI, Titre 1er, Annexe VI.1-1
	NATION BULGARIA AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Кожа Source: НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г.
	NATION CYPRUS AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: δέρμα Source: Οι περί Ασφάλειας και Υγείας στην Εργασία (Χημικοί Παράγοντες) Κανονισμοί του 2001 έως 2021
	NATION CZECHIA AL	Long Term: 270 mg/m3; Short Term: Ceiling - 550 mg/m3 Notes: D, I Source: Nařízení vlády č. 361-2007 Sb
	NATION GERMANY AL	Long Term: 270 mg/m3 - 50 ppm Notes: DFG, EU, Y, 1(I) Source: TRGS 900
	NATION DENMARK AL	Long Term: 275 mg/m3 - 50 ppm Notes: EH Source: BEK nr 2203 af 29/11/2021
	NATION SPAIN AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: vía dérmica, VLI Source: LEP 2022
	NATION ESTONIA AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: A, S Source: Vabariigi Valitsuse, 20. märtsi 2001. a määrus nr 105
	NATION FINLAND AL	Long Term: 270 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: iho Source: HTP-ARVOT 2020
	NATION FRANCE AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Risque de pénétration percutanée Source: INRS outil65, article R. 4412-149 du Code du travail
	NATION GREECE AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Δ Source: ΦΕΚ 94/Α` 13.5.1999
	NATION CROATIA AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: koža Source: 2000/39/EZ
	NATION HUNGARY AL	Long Term: 275 mg/m3; Short Term: 550 mg/m3 Notes: EU1, N Source: 5/2020. (II. 6.) ITM rendelet
	NATION IRELAND AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Sk, IOELV Source: 2021 Code of Practice
	NATION ITALY AL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Cute Source: D.lgs. 81/2008, Allegato XXXVIII

NATIONAL	LITHUANIA	Long Term: 250 mg/m3 - 50 ppm; Short Term: 400 mg/m3 - 75 ppm Notes: O Source: 2011 m. rugsėjo 1 d. Nr. V-824/A1-389
NATIONAL	LUXEMBOURG	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Peau Source: Mémorial A n.226 du 22 mars 2021
NATIONAL	LATVIA	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Āda Source: KN325P1
NATIONAL	MALTA	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: skin Source: S.L.424.24
NATIONAL	NETHERLANDS	Long Term: 550 mg/m3 Source: Arbeidsomstandighedenregeling - Lijst A
NATIONAL	NORWAY	Long Term: 270 mg/m3 - 50 ppm Notes: H E Source: FOR-2021-06-28-2248
NATIONAL	POLAND	Long Term: 260 mg/m3; Short Term: 520 mg/m3 Notes: skóra Source: Dz.U. 2018 poz. 1286
NATIONAL	PORTUGAL	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: Cutânea Source: Decreto-Lei n.º 1/2021
NATIONAL	ROMANIA	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: P, Dir. 2000/39 Source: Republicarea 1 - nr. 743 din 29 iulie 2021
NATIONAL	SLOVAKIA	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: K Source: 355 NARIADENIE VLÁDY z 10. mája 2006
NATIONAL	SLOVENIA	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: K, Y, EU1 Source: UL št. 72, 11. 5. 2021
NATIONAL	SWEDEN	Long Term: 275 mg/m3 - 50 ppm; Short Term: 550 mg/m3 - 100 ppm Notes: H Source: AFS 2021:3
WEL-EH40	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	Long Term: 274 mg/m3 - 50 ppm; Short Term: 548 mg/m3 - 100 ppm Notes: Sk Source: EH40/2005 Workplace exposure limits (Fourth Edition 2020)
SUVA	SWITZERLAND	Long Term: 275 mg/m3 - 50 ppm; Short Term: 275 mg/m3 - 50 ppm Notes: SSC, VRS / OAW Source: suva.ch/valeurs-limites

Predicted No Effect Concentration (PNEC) values

2-methoxy-1-methylethyl acetate

CAS: 108-65-6 Exposure Route: Fresh Water; PNEC Limit: 635 mg/m3

Exposure Route: Intermittent releases (fresh water); PNEC Limit: 6.35 mg/l

Exposure Route: Marine water; PNEC Limit: 63.5 mg/m3

Exposure Route: Microorganisms in sewage treatments; PNEC Limit: 100 mg/l

Exposure Route: Freshwater sediments; PNEC Limit: 3.29 mg/kg

Exposure Route: Marine water sediments; PNEC Limit: 329 µg/kg

Exposure Route: Soil; PNEC Limit: 290 µg/kg

Derived No Effect Level (DNEL) values

Hydrocarbons, C9, aromatics

CAS: 128601-23-0 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 150 mg/kg/day; Consumer: 32 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects

Worker Professional: 25 mg/kg; Consumer: 11 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 11 mg/kg

2-methoxy-1-methylethyl acetate

CAS: 108-65-6 Exposure Route: Human Inhalation; Exposure Frequency: Long Term, systemic effects
Worker Professional: 275 mg/kg/day; Consumer: 33 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Short Term, systemic effects
Worker Professional: 550 mg/kg/day

Exposure Route: Human Inhalation; Exposure Frequency: Long Term, local effects
Consumer: 33 mg/kg/day

Exposure Route: Human Dermal; Exposure Frequency: Long Term, systemic effects
Worker Professional: 796 mg/kg; Consumer: 320 mg/kg

Exposure Route: Human Oral; Exposure Frequency: Long Term, systemic effects
Consumer: 36 mg/kg

8.2. Exposure controls

Eye protection:

Eye glasses with side protection.(EN166)

Protection for skin:

Chemical protection clothing. Safety shoes.

Protection for hands:

Protection for hands:

Suitable materials for safety gloves; EN 374:

Nitrile rubber - NBR: thickness ≥0,35mm; breakthrough time ≥480min.

Respiratory protection:

Gas filter type AX .

Thermal Hazards:

Not expected if used as intended

Environmental exposure controls:

Prevent the product from entering sewers or surface and underground water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Characteristic
pH:	Not Relevant Notes: Not applicable, non-aqueous mixture
Kinematic viscosity:	<= 20,5 mm2/s (40 °C)
Melting point/freezing point:	N.A.
Boiling point or initial boiling point and boiling range:	35 °C (95 °F)
Flash point:	24 °C (75 °F)
Lower and upper explosion limit:	N.A.
Relative vapour density:	N.A.
Vapour pressure:	N.A.
Density and/or relative density:	0.88 g/cm3
Solubility in water:	Immiscible
Solubility in oil:	Not Relevant Notes: Not determined, as it is not required for CLP classification
Partition coefficient n-octanol/water (log value):	Not Relevant

Notes: Not applicable to mixtures

Auto-ignition temperature:	N.A.
Decomposition temperature:	Not Relevant Notes: Not applicable, as the mixture is not self-reactive
Flammability:	The product is classified Flam. Liq. 3
Volatile Organic compounds - VOCs =	84.00%; 739.20g/L

Particle characteristics:

Particle size: N.A.

9.2. Other information

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Data not available.

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with oxidizing materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological Information of the Preparation

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	Not classified Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H335), STOT SE 3(H336)
i) STOT-repeated exposure	Not classified Based on available data, the classification criteria are not met
j) aspiration hazard	The product is classified: Asp. Tox. 1(H304)

Toxicological information on main components of the mixture:

Hydrocarbons, C9, aromatics

CAS: 128601-23-0	a) acute toxicity	LD50 Oral Rat = 4 ml/Kg LC50 Inhalation Vapour Rat > 6193 mg/m3 4h LD50 Skin Rabbit > 3160 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h
	c) serious eye damage/irritation	Eye Irritant Rabbit No

	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Rat Negative
	g) reproductive toxicity	No Observed Adverse Effect Level Inhalation Rat = 7500 mg/m3

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LC50 Inhalation Vapour Rat > 5000 mg/m3 8h
		LD50 Skin Rabbit > 2000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h
	c) serious eye damage/irritation	Eye Irritant Rabbit No
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	f) carcinogenicity	Genotoxicity Rat Negative
		Carcinogenicity Inhalation Rat Positive
	g) reproductive toxicity	No Observed Adverse Effect Level Rat > 20000 mg/m3

2-methoxy-1-methylethyl acetate

CAS: 108-65-6	a) acute toxicity	LD50 Oral Rat = 6190 mg/kg
		LD50 Skin Rabbit > 5000 mg/kg 24h
	b) skin corrosion/irritation	Skin Irritant Rabbit Negative 4h
	c) serious eye damage/irritation	Eye Irritant Rabbit No
	d) respiratory or skin sensitisation	Skin Sensitization Guineapig Negative
	g) reproductive toxicity	No Observed Effect Level Rat = 3.69 mg/l

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Toxic to aquatic life with long lasting effects.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 2(H411)

List of Eco-Toxicological properties of the components

Hydrocarbons, C9, aromatics

CAS: 128601-23-0	a) Aquatic acute toxicity: LL50 Fish Oncorhynchus mykiss = 9.2 mg/L 96h
	b) Aquatic chronic toxicity: NOELR Fish = 1.23 mg/L
	a) Aquatic acute toxicity: EL50 Daphnia Daphnia magna = 21.3 mg/L 48h
	b) Aquatic chronic toxicity: NOELR freshwater invertebrate = 2.14 mg/L
	a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata = 2.9 mg/L
	a) Aquatic acute toxicity: EL50 Tetrahymena pyriformis = 4.73 mg/L 48h

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

	a) Aquatic acute toxicity: LL50 Fish Oncorhynchus mykiss = 10 mg/L 96h
	a) Aquatic acute toxicity: EL50 Daphnia Daphnia magna = 4.5 mg/L 48h
	b) Aquatic chronic toxicity: NOELR Daphnia Daphnia magna = 2.6 mg/L
	a) Aquatic acute toxicity: NOELR Algae Pseudokirchnerella subcapitata = 0.5 mg/L 72h

2-methoxy-1-methylethyl acetate

CAS: 108-65-6	a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 130 mg/L 96h
	b) Aquatic chronic toxicity: NOEC Fish Oryzias latipes = 47.5 mg/L

a) Aquatic acute toxicity: LC50 Daphnia Daphnia magna = 408 mg/L 48h

b) Aquatic chronic toxicity: NOEC Daphnia Daphnia magna > 100 mg/L

a) Aquatic acute toxicity: NOEC Algae Selenastrum capricornutum >= 1000 mg/L

12.2. Persistence and degradability

Hydrocarbons, C9, aromatics

CAS: 128601-23-0 Non-readily biodegradable Value: 78

2-methoxy-1-methylethyl acetate

CAS: 108-65-6 Readily biodegradable Test: Dissolved organic carbon
Notes: OECD GL 301E

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT or vPvB substances present in concentration >= 0.1%

12.6. Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

The product disposed of as such, pursuant to Regulation (EU) 1357/2014, must be classified as hazardous waste

A waste code according to the European List of Wastes (LoW) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Properties of waste which render it hazardous (Annex III, Directive 2008/98/EC):

N.A.

SECTION 14: Transport information

14.1. UN number or ID number

1263

14.2. UN proper shipping name

ADR-Shipping Name: PAINT RELATED MATERIAL

IATA-Shipping Name: PAINT RELATED MATERIAL

IMDG-Shipping Name: PAINT RELATED MATERIAL

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Most important toxic component: Hydrocarbons, C9, aromatics

Marine pollutant: Yes

Environmental Pollutant: Yes

IMDG-EMS: F-E, S-E

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 3

ADR - Hazard identification number: 30

ADR-Special Provisions: 163 367 650

ADR-Transport category (Tunnel restriction code): 3 (D/E)

ADR Limited Quantities: 5 L

ADR Excepted Quantities: E1

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3 A72 A192

Sea (IMDG):

IMDG-Stowage and handling: Category A

IMDG-Segregation: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 163 223 367 955

14.7. Maritime transport in bulk according to IMO instruments

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)	Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 286/2011 (ATP 2 CLP)	Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)	Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)	Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)	Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)	Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)	Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)	Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)	Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)	Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)	Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 CLP)	Regulation (EU) n. 2024/2564 (ATP 22 CLP)
Regulation (EU) n. 2024/2865	Regulation (EU) n. 2025/1222 (ATP 23 CLP)

Regulation (EC) nr 648/2004 (Detergents).

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: None.

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Product belongs to category: P5c	5000	50000
Product belongs to category: E2	200	500

Explosives precursors – Regulation 2019/1148

No substances listed

Regulation (EU) No 649/2012 (PIC regulation)

No substances listed

German Water Hazard Class.

Class 3: extremely hazardous.

German Lagerklasse according to TRGS 510:

LGK 3

SVHC Substances:

No SVHC substances present in concentration >= 0.1%

Dir. 2004/42/EC (VOC directive)

(ready to use)

Volatile Organic compounds - VOCs = 84.00 %

Volatile Organic compounds - VOCs = 739.20 g/L

EXENCE REINFORCER S (not ready to use)

Volatile Organic compounds - VOCs = 84.00 %

Volatile Organic compounds - VOCs = 739.20 g/L

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

2-methoxy-1-methylethyl acetate

SECTION 16: Other information

Code	Description
EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 3, H226	On basis of test data
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Asp. Tox. 1, H304	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment
CSR: Chemical Safety Report
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level.
DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: Keep Away From Heat
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- Safety Data Sheet
- SECTION 1: Identification of the substance/mixture and of the company/undertaking
- SECTION 2: Hazards identification
- SECTION 3: Composition/information on ingredients
- SECTION 7: Handling and storage
- SECTION 8: Exposure controls/personal protection
- SECTION 9: Physical and chemical properties
- SECTION 11: Toxicological information
- SECTION 12: Ecological information
- SECTION 15: Regulatory information

Exposure Scenario
2-methoxy-1-methylethyl acetate

Exposure Scenario, 08/06/2021

Substance identity	
	2-methoxy-1-methylethyl acetate
CAS No.	108-65-6
INDEX No.	607-195-00-7
EINECS No.	203-603-9
Registration number	01-2119475791-29

Table of contents

1. **ES 1**

1. ES 1

1.1 TITLE SECTION

Exposure Scenario name	Professional application of coatings and inks by brush or roller
Date - Version	29/04/2021 - 1.0
Main user group	Professional uses
Sector(s) of use	Professional uses (SU22)
Product Categories	Coatings and paints, thinners, paint removers (PC9a)

Environment Contributing Scenario

CS1	ERC8a - ERC8d

Worker Contributing Scenario

CS2 Large surfaces - Rolling, Brushing	PROC10

1.2 Conditions of use affecting exposure

1.2. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

Environmental release categories	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) - Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) (ERC8a, ERC8d)

Product (article) characteristics

Physical form of product:
Liquid

Concentration of substance in product:
Covers concentrations up to 100 %

Amount used, frequency and duration of use (or from service life)

Amounts used:
Daily amount per site = 5000 kg

Release type: Continuous release

Emission days: 365 days per year

Conditions and measures related to sewage treatment plant

STP type:
Municipal Sewage Treatment Plant
Water - minimum efficiency of: = 87.3 %

Conditions and measures related to treatment of waste (including article waste)

Waste treatment
Contain and dispose of waste according to local regulations.

Other conditions affecting environmental exposure

Local marine water dilution factor: 100
Local freshwater dilution factor: 10

Additional good practice advice. Obligations according to Article 37(4) of REACH do not apply.

Additional Good Practice Advice:
Site should have a spill plan to ensure that adequate safeguards are in place to minimize the impact of episodic releases.

1.2. CS2: Worker Contributing Scenario: Large surfaces - Rolling, Brushing (PROC10)

Process Categories	Roller application or brushing (PROC10)

Product (article) characteristics

Physical form of product:

Liquid

Concentration of substance in product:

Covers concentrations up to 100 %

Amount used, frequency and duration of use/exposure

Amounts used:

Daily amount per site = 5000 kg

Duration:

Exposure duration = 8 h/day

Frequency:

Use frequency = 365 days per year

Technical and organisational conditions and measures

Technical and organisational measures

Ensure control measures are regularly inspected and maintained.
Carry out in a vented booth or extracted enclosure.

Conditions and measures related to personal protection, hygiene and health evaluation

Personal protection

Wear a respirator conforming to EN140.

Other conditions affecting worker exposure

Covers indoor and outdoor use

Temperature: Assumes use at not more than 20 °C above ambient temperature.

1.3 Exposure estimation and reference to its source

1.3. CS1: Environment Contributing Scenario (ERC8a, ERC8d)

protection target	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
freshwater	= 0.003 mg/L	ECETOC TRA environment v3	= 0.004
freshwater sediment	= 0.014 mg/kg KW	ECETOC TRA environment v3	= 0.004
marine water	= 0.0004 mg/L	ECETOC TRA environment v3	= 0.007
marine sediment	= 0.002 mg/kg KW	ECETOC TRA environment v3	= 0.007
soil	= 0.001 mg/kg KW	ECETOC TRA environment v3	= 0.004

1.3. CS2: Worker Contributing Scenario: Large surfaces - Rolling, Brushing (PROC10)

Exposure route, Health effect, Exposure indicator	Exposure level	Calculation method	Risk Characterization Ratio (RCR)
inhalative, systemic, long-term	= 137.71 mg/m³	ECETOC TRA worker v3	= 0.5
dermal, systemic, long-term	= 13.71 mg/kg bw/day	ECETOC TRA worker v3	0.18

1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Guidance to check compliance with the exposure scenario:

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.